Sheet <u>1</u> of <u>5</u>

Pater					_	t of Commerce lemark Office	Atty. Doci 0575/5946 MVM	ket No. 59/JPW/SHS/	Serial No. 09/828,413					
INFORMATION DISCI (Use several sheet								LOSURE (AN 0 9 2002	Applicants Robert H. DeBellis and Bernard F. Erlanger				
									2002	Filing Dat April 6,		Group		
		_						U.S. PAT	TENT BOCCMENT		· .	RA	50.	
Examiner Initial		Γ	Ocun	ent	Num	ıber		Date	Name	Class	Subclass	Filing Date if Appropriate CENTER 1600/		
											IEC,	XC~.	172	
												CENT	ERICO	
													,000	
									,					
				<u></u>							·			
							F	OREIGN I	PATENT DOCUME	NTS				
		Document Number						_	~ .	Class		Translation		
		Do	cum	ent	Nu	mb	er	Date	Country	Class	Subclass	Tran	slation	
		Do	cum	ent	Nu	mb	er —	Date	Country	Class	Subclass	Tran Yes	No No	
		Do	eum	ent	Nu	m D	er	Date	Country	Class	Subclass			
		Do	cum	ent	Nu		er	Date	Country	Class	Subclass			
		Do	cum	ent	Nu	mo	er 	Date	Country	Class	Subclass			
		Do	cum	ent	Nu		er	Date	Country	Class	Subclass			
			OT	HER	A DO	OCU	ME	ENTS (Includ	ling Author, Title, Date,	Pertinent	Pages, Etc.)	Yes		
<u> </u>		Ada	OTI chi, l	HER K. e	a DO	OCU., (1	ME 980	CNTS (Includ	ling Author, Title, Date,	Pertinent egation O	Pages, Etc.) f Deoxyhemogle	Yes Obin S	No	
G		Ada	OTI chi, l icipa	HER K. e	a DO	OCU ,, (1	ME 980 mo	ENTS (Includ 0) "Nucleat	ling Author, Title, Date,	Pertinent egation Of Deoxyhe	Pages, Etc.) f Deoxyhemogle	Yes Obin S	No	
B		Ada Part Pho	OTI chi, l icipa spha	HER K. e	t al.	OCU ,,(1 'He'	ME 980 mo	ENTS (Includ 0) "Nucleat eglobin A In biol. Chem.	ling Author, Title, Date, ion-Controlled Aggreen The Aggregation Of	Pertinent egation Of Deoxyhohibit 1);	Pages, Etc.) f Deoxyhemogleemoglobin S In	obin S Concer	No	
B	/	Ada Part Pho Ball	oti, icipa spharas, S	HER K. e tion te B	DO tal.	OCU., (1 The er" <u>]</u>	ME 980 mo J. B	ENTS (Include 0) "Nucleate 10 globin A In 10 liol. Chem. 13 (19) "Effect	ling Author, Title, Date, ion-Controlled Aggreen The Aggregation Of 255: 3092-3099 (Extended)	Pertinent egation Of Deoxyhehibit 1);	Pages, Etc.) f Deoxyhemoglemoglobin S In logical Properti	obin S Concer	No	
	/	Ada Part Pho Ball	oti chi, licipa sphatas, S	HER K. e ttion te B	t al. Offeet a	OCU , (1 Heer"] l., (wytes	ME 980 mo J. B 198	CNTS (Include 0) "Nucleate 10 globin A Include	ling Author, Title, Date, ion-Controlled Aggreen The Aggregation Of 255: 3092-3099 (Extor Of Hydroxyurea On The Aggreen Of Hyd	Pertinent egation Of Deoxyhehibit 1); The Rheo	Pages, Etc.) f Deoxyhemogle emoglobin S In logical Properticalibit 2);	obin S Concer	No	
\$ \$	/	Ada Part Pho Ball Sick	oti chi, licipa sphatas, S	HER K. e ttion te B .K.	a DO t al. Of uffe et a	OCU, (1 Heer"] 1., (1 vytes	ME 980 198 In 'Pa	ENTS (Include 0) "Nucleate 19 globin A In 19 iol. Chem. 18 9) "Effect 19 Vivo" Am 19 thogenesis	ling Author, Title, Date, ion-Controlled Aggreen The Aggregation Of 255: 3092-3099 (Exto Of Hydroxyurea On J. Hematol. 32: 104-	Pertinent egation Of Deoxyhehibit 1); The Rheo	Pages, Etc.) f Deoxyhemogle emoglobin S In logical Properticalibit 2);	obin S Concer	No	
	1	Ada Part Pho Ball Sick	OTI chi, licipa sphar as, S de Er	HER K. e ttion te B .K.	a DO t al. Of uffe et a	OCU, (1 Heer"] 1., (1 vytes	ME 980 198 In 'Pa	ENTS (Include 0) "Nucleate 19 globin A In 19 iol. Chem. 18 9) "Effect 19 Vivo" Am 19 thogenesis	ling Author, Title, Date, ion-Controlled Aggreen The Aggregation Of 255: 3092-3099 (Extended to the Aggreen The Aggregation Of J. Hematol. 32: 104-And Treatment Of Signature 1 (1) (1) (1) (2) (1) (2) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Pertinent egation Of Deoxyhehibit 1); The Rheo	Pages, Etc.) f Deoxyhemogle emoglobin S In logical Properticalibit 2);	obin S Concer	No	
EXAMINE	CR: Init	Ada Part Pho Ball Sick Bun 337	oTichi, licipa spharas, Sale Enn, H.	HER K. e tion te B .K. ryth F. (a DO tal. Offuffeet a rocy 199 (E	OCU, (1 Heer"] l., (1 Vytes 17) "Cxhi	ME 980 mod J. B 198 In 'Pa ibit	CNTS (Include 0) "Nucleate 10 globin A Include 11 globin A Include 12 globin A Include 13 globin A Include 13 globin A Include 14 globin A Include 15 globin A Include 16 globin A Include 16 globin A Include 17 globin A Include 18 globin A Include	ling Author, Title, Date, ion-Controlled Aggreen The Aggregation Of 255: 3092-3099 (Extended to the Aggreen The Aggregation Of J. Hematol. 32: 104-And Treatment Of Signature 1 (1) (1) (1) (2) (1) (2) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	Pertinent egation Of Deoxyhohibit 1); The Rheo 111 (Exhickle Cell	Pages, Etc.) f Deoxyhemogle emoglobin S In logical Propertication (1); Disease" N. En	obin S Concer es Of gl. J. M	No	

Applicants: Robert H. De Bellis and Bernard F. Erlanger

Serial No: Filed:

09/828,413 April 6, 2001

Exhibit A

Sheet_2 of <u>5</u>

Form PTO-1449								_	t of Commerce lemark Office	Atty. Doci 0575/5946 MVM	ket No. 69/JPW/SHS/	Serial No. 09/828,413		
INFORMATION DISCL (Use several sheets								OSURE (s if necess:	AN 0 9 2002	Applicant Robert I Erlange	H. DeBellis and	Bernard F.		
									JAN 0 9 ZUUZ ST	Filing Dat	<u> </u>	Group		
									Te To spenie	April 6,	2001	E		
	1	· · · · ·						U.S. PAT	TENT BOCCMENT	S	<u></u>	, 	S/V/F	
Examiner Initial		D	ocum	ent l	Nun	ber		Date	Name	Class	Subclass	Ming, if Appl	Date 108 129 129 129 129 129 129 129 129 129 129	
											-017 (WIER	160	
													1000/29 ₀₀	
			T											
			1	†								<u> </u>		
			+							†		 		
-,	 	$\vdash\vdash$	+	┢						-		 		
	<u> </u>		-	-	ļ					ļ		ļ		
	<u> </u>			<u> </u>			F	OREIGN I	 PATENT DOCUME	ENTS		<u> </u>		
		Doc	ume	ent	Nii	mh		Date	Country	Class	Subclass	Translation		
			um		ı Tu.	ш	CI	Date				Yes	No	
	┼		Т	T	1							1 68	140	
	-		+	-	_					 		+		
	ļ			<u> </u>	<u> </u>					-				
	<u> </u>	\sqcup			<u> </u>									
·														
	т.	,							ling Author, Title, Date					
α	_	Char	ache	, S.	et a	al.,	(19	987) "Hydr	oxyurea-Induced Aug	gmentatio	n Of Fetal Hem	oglobii	n	
4		Prod	uctio	n I	n Pa	atie	nts	With Sick	le Cell Anemia" <u>Bloo</u>	<u>d</u> 69 : 109	-116 (Exhibit 4);		
-4	1	Char	ache	, S.	et a	al.,	(19	995) "Effec	t Of Hydroxyurea Or	1 The Free	quency Of Painf	ul Cris	ses	
\$		Charache, S. et al., (1995) "Effect Of Hydroxyurea On The Frequency Of Painful Crises In Sickle Cell Anemia" N. Engl. J. Med. 332: 1317-1322 (Exhibit 5);												
	/											eovyg	enation	
\$		Charache, S., and C.L. Conley (1964) "Rate Of Sickling Of Red Cells During Deoxygenation Of Blood From Persons With Various Sickling Disorders" <u>Blood</u> 24 : 25-48 (Exhibit 6);												
EXAMINI	ER							DATE CON		/	(23.		- / /	
	\triangle	6		<u> </u>					6	11/03				
									on is in conformance with MI		w line through citation	if not in		
conformanc	e and n	ot cons	iaerea	ı. ınç	iuae	copy	ort	nis form with n	ext communication to applica	ant.				

Sheet 3 of 5 Form PTO-1449 Atty. Docket No. Serial No. U.S. Department of Commerce 0575/59469/JPW/SHS/ 09/828,413 Patent and Trademark Office MVM Applicants INFORMATION DISCLOSURE CITATIO Robert H. DeBellis and Bernard F. (Use several sheets if necessary) Erlanger Filing Date April 6, 2001 U.S. PATE Class Examiner **Document Number** Date Subclass Initial FOREIGN PATENT DOCUMENTS Date **Document Number** Country Class Subclass Translation Yes No OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Dover, G.J. et al., (1986) "Hydroxyurea Induction Of Hemoglobin F Production In Sickle Cell Disease; Relationship Between Cytotoxicity And F Cell Production" Blood 67: 735-738 (Exhibit 7); Ferster, A. et al., (1996) "Hydroxyurea For Treatment Of Severe Sickle Cell Anemia: A Pediatric Clinical Trial" Blood 88: 1960-1964 (Exhibit 8);

Ferster, A. et al., (1996) "Hydroxyurea For Treatment Of Severe Sickle Cell Anemia:

A Pediatric Clinical Trial" Blood 88: 1960-1964 (Exhibit 8);

Gillette, P.N. et al., (1974) "Sodium Cyanate As A Potential Treatment For Sickle Cell

Disease" N. Eng. J. Med. 290: 654-660 (Exhibit 9);

Goldberg, M.A. et al., (1990) "Treatment Of Sickle Cell Anemia With Hydroxyurea

And Erythropoietin" N. Engl. J. Med. 323: 366-372 (Exhibit 10);

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 4 of 5 Attv. Docket No. Serial No. Form PTO-1449 U.S. Department of Commerce 0575/59469/JPW/SHS/ 09/828,413 Patent and Trademark Office MVM Applicants INFORMATION DISCLOSURE CITATIONS Robert H. DeBellis and Bernard F. (Use several sheets if necessary) Erlanger JAN 0 9 2002 Filing Date April 6, 2001 U.S. PATENTO GENERITS Examiner **Document Number** Date Class Subclass Initial FOREIGN PATENT DOCUMENTS **Document Number** Date Country Class Subclass **Translation** Yes No OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Hahn, E.V., and E.B. Gillespie (1927) "Sickle Cell Anemia: Report Of A Case Greatly Improved By Splenectomy: Experimental Studies Of Sickle Cell Formation" Arch. Intern. Med. 39: 233-254 (Exhibit 11);

Med. 39: 233-254 (Exhibit 11);

Huisman, T.H.J. and A.M. Dozy (1965) "Studies On The Heterogeneity Of Hemoglobin. IX.

The Use Of Tris (Hydroxymethyl) Aminomethane-HCI Buffers In The Anion-Exchange Of Chromatography Hemoglobins" J. Chromatog. 19: 160-169 (Exhibit 12);

Orringer, E.P. et al., (1991) "Effects Of Hydroxyurea On Hemoglobin F And Water

Content In The Red Blood Cells Of Dogs And Of Patients With Sickle Cell Anemia" Blood

78: 212-216 (Exhibit 13);

EXAMINER DATE CONSIDERED 6/11/03

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 5 of 5

Paten						Pat	ten	t and Trac	t of Commerce lemark Office	Atty. Doci 0575/5946 MVM	ket No. 59/JPW/SHS/	Serial No. 09/828,413		
	IN	FOF	RMA (Us	AT] e se	ION ever:	DIS al sh	SCI ieet	LOSURE (ary)	Applicants Robert H. DeBellis and Bernard F Erlanger				
								Ĭ	The state of the s	Filing Dat April 6,		Group	J.S."	
								U.S. PA	TENT DOCUMEN		TECH O	JAN,	N/L	
Examiner Initial		,	Docu	mei	nt Nu	mber		Date	Name	Class	Subclass	FHing I	Date ropriate	
			+	+		+					-	100/200		
				1		丰								
		$\left \cdot \right $	_	-		-	<u> </u> 					 -		
				1		1		-						
				\dashv	-	 .	ļ							
	1				. 27			T	PATENT DOCUM			Τ		
		Do	ocur	ner	nt Nu	1mb	er	Date	Country	Class	Subclass	Translation Yes No		
				4		-	-					\perp		
		\Box				+	-					1		
						_			ding Author, Title, Date					
\$	/	Pauling, L. et al., (1949) "Sickle Cell Anemia, A Molecular Disease" Science 110: 543-548												
		 ` 	hib							D' "		240		
\$	1	Steinberg, M.H. (1999) "Management Of Sickle Cell Disease" N. Engl. J. Med. 340: 1021-1030 (Exhibit 15);												
1		 	Rogers, G.P. et al., (1990) "Hemotologic Responses Of Patients With Sickle Cell Disease											
9			To Treatment With Hydroxyurea" N. Engl. J. Med. 322: 1037-1045 (Exhibit 16);											
EXAMINE	No.	من						DATE CON	SIDERED 6/4/	03		-		
									on is in conformance with M		w line through citation	n if not in		